Digital Psychedelia: Hidden Experience and the Challenge of Paranoia

Introduction

Over the past 15 years, several groups of researchers have sought to use clinical trials to reintroduce psychedelics to mainstream society, reporting impressive efficacy from trials at university sites such as Johns Hopkins, New York University and Imperial College London, in the treatment of clinical targets such as unipolar depression and anxiety, addiction and post-traumatic stress disorder (PTSD) when compared with next-best treatments. Population scientists have also marshaled survey evidence from the underground use of psychedelics, revealing some of the lowest harm profiles amongst all psychoactive drugs.

I have been following conversations amongst university-based psychedelic researchers and therapists and community-based psychedelic advocates since 2013. From 2013-2015 this was as part of the research community, as a postdoctoral researcher conducting a qualitative study for a prominent US psychedelic research group. Since then, I have been conducting an extended ethnographic study of the revival of interest in psychedelics in North America and Western Europe, including through attending psychedelic workshops, conferences and meet-ups. Over the years I have gotten to know many healers, mental health professionals, drug reform advocates, Psychonauts ('explorers of the mind'), hippies and New Agers, advocates of 'cognitive liberty,' and psychedelic-inspired artists, who have been keen to see a wider appreciation and use of psychedelics – whether viewed as 'tools', 'drugs', plant and fungal 'allies', 'teachers,' or 'medicines.'

During the last five years, several pharmaceutical companies have gotten involved, and venture capital is now reshaping the psychedelic 'community'-cum-industry in key ways. There are heated debates over the value of psychedelic 'mainstreaming'. The use of digital platforms in the administration and aftercare of psychedelic-assisted therapies has been less-debated, though it is growing apace. When the largest psychedelic biotech company Compass Pathways relaunched as a for-profit company in 2016, it did so in partnership with the predictive analytics company MindStrong, and with capital investment from Peter Thiel, billionaire founder of the controversial big data analytics company Palantir. Fast forward to this year and in April, a partnership between ATAI Life Sciences and the digital therapeutics company Psyber announced approval for psychedelic-assisted therapy trials for depression and addiction that will use a brain-computer-interface in place of human therapists. Meanwhile, smaller players like Mindleap Health and Field Trip have begun offering apps for 'integrating' the insights and experiences produced through psychedelic use – regardless of whether these were had legally or illegally – into clients' everyday lives. Maya Health has launched an app for therapists and practitioners looking to organize their caseload of psychedelic-using clients. The MyDelica app to be launched later in 2021 aims to provide advice to psychedelic users, while recording data on psychological history and trip experiences for the explicit purposes of research and selling data "to industry organizations so that they can better serve you."

I use the term 'digital psychedelia' to refer to an infrastructure of digital platforms that is capitalizing on the revival of interest in the therapeutic potential of psychedelic experiences. The use of digital platforms to guide and research psychedelic experiences is inspiring both utopian and dystopian imaginaries for my interlocutors. How might we approach the big data-enabled analysis of an expansive set of experiences, including the mythic and the mystical, the revelation of inner and (and *as*) outer truths, and encounters with other planes of existence and spiritual agencies? In this short piece, I will introduce utopian and dystopian visions of where the mainstreaming of psychedelics through digital psychedelia is leading. I hope to show how the very friction between these visions is suggestive of wider and more liberatory psychopolitics at this rapidly unfolding juncture.

The revival of psychedelic-assisted therapy has been to a large extent premised on the permeability of psychedelic and everyday experiences, with the drug-induced states holding a kind of promissory value through experiences and encounters that then require being integrated into the everyday. Big data analysis also raises questions about the susceptibility of those under the influence of psychedelics, to different modes of address, encounter and attention. I have become curious about the predictive possibilities being opened up, not least because speculative futures are driving the economic boom of the emerging psychedelic industry (Noorani and Martell, 2021; Sanabria, 2021). In other words, these once-countercultural and *still-illegal* drugs are successfully being rebranded as much-needed, innovative mental health treatments. In a March 2021 press release launching their psychedelics-related Master's program, the University of Wisconsin-Madison predicted that the psychedelic therapeutics industry will grow to $100 billion USD by 2030. What the intersection of psychedelic experiences and predictive analytics might yield is being read with excitement by some, and suspicion by others.

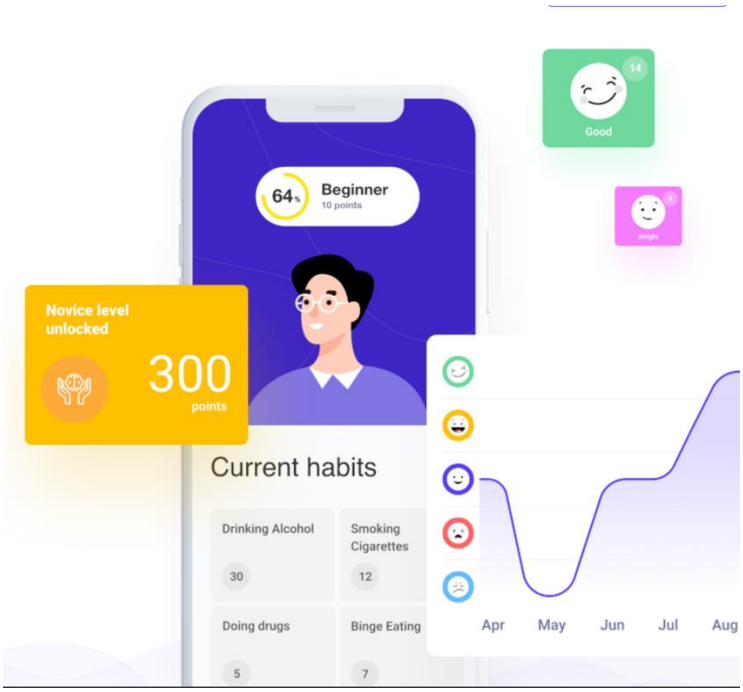
Part 1: Utopian Imaginaries

One reason psychedelics are so interesting as drugs is their sensitivity to context. Today's psychedelic researchers are not only well-aware of this, but often embrace it for the research opportunities entailed. The therapeutic modalities that have been developed utilize aesthetically rich settings, with participants laying on sofas with eye shades and carefully chosen musical playlists in comfortable rooms with soft lighting and artwork. Researchers in panel discussions at conferences often enthusiastically reel off a plethora of potential variables that could be contributing to any particular treatment's efficacy, calling for more research into the non-pharmacological factors in play. 'More work is needed,' as the phrasing at the end of so many of the trial publications goes – for example, setting up research trials that would compare the relative efficacies of different musical playlists that accompany participants on their psychedelic journeys, or the difference wearing eyeshades or the instruction to 'go inwards' makes. In this way, the context-sensitivity of the psychedelic experience can destabilize the pharmaco-centrism of mental healthcare. However, designing research trials to generate conclusive data about the role of non-drug factors is currently little more than a researcher's fantasy, due to the high costs and misalignment with the key aims of drug sponsors who are looking to medicalize psychedelics for clinical targets like depression and PTSD.

Rather, the conversations I have observed between researchers, drug sponsors and regulators mostly focused on minimizing cost and labor in order to scale such therapies. Current psychedelic-assisted therapeutic modalities require many hours to prepare participants, 'hold' them while they are having their psychedelic experiences, and support them in integrating their experiences afterwards. Integration practices are usually described as requiring time to return to, 'feel into', and explore a psychedelic experience – often at first non-verbally – before eventually putting the experience into words. The whole package is costly, incentivizing industry-led trials to streamline the therapies as they are tested through larger and multi-site clinical studies. In turn, these trials are designed to ask questions such as: could the follow-up to a trial that utilized multiple psychedelic sessions achieve similar levels of treatment efficacy with just one session? Could a program of post-psychedelic integration meetings extended over a year be trimmed to months or even weeks while maintaining the same safety levels?

With such questions foregrounded between the researchers and regulators who are green-lighting the trials, inquiry into the contextual (i.e. "non-drug") factors in the healing process is sidelined. Consequently, for an increasing number of researchers, the hope for answering questions about the role of contextual factors lies in scaling current treatment modalities through the use of apps and wearable devices, in order to capture the volume and variety of data needed to analyze all variables. Such big data-enabled testing is already being pursued in psychedelic trials using virtual reality headsets, and the apps offered or being developed by Mindleap, Field Trip, and MyDelica designed to monitor behaviour, provide integration counseling, and record user feedback through audio and video-based trip reports, diaries, reflections from sofa-side human therapists, interfacing with screen-based content and devices, location and movement data and so forth. Digital psychedelia researchers and investors hope that these sorts of experimental and behavioral datasets could then be harvested for 'best practices' and new possibilities for personalized psychedelic-assisted therapy. Prominent psychedelic researchers have begun to argue for such research in peer-reviewed journals (for example, Carhart-Harris et al., 2021).

If these companies and researchers are successful in their aims, the ensemble of data-gathering platforms, devices, and apps that these trials and consumer products rely on will mediate the integration of psychedelic experiences. It will produce user datasets for use in commercial and academic research, and also the interfaces through which users come to understand the nature of their psychedelic experiences and the implications for their wider lives. In this way the infrastructure of digital psychedelia has the potential to recursively shape the meaning users make of their psychedelic experiences, and in more general terms shape the expectations and frameworks (or 'scripts') for future psychedelic experiences at both collective and individual levels. Consistent with the aspirations of bio- and neurofeedback technologies, they could even intervene upon psychedelic experiences in real-time when the drug lasts long enough to afford it – for instance, suggesting changes in the choice of accompanying music during a 3-5 hour mushroom trip or an even longer LSD experience.



Caption: Prototype graphic of the Mindleap platform, obtained via Psymposia in March 2021

Part 2: Dystopian Imaginaries

There are deep rifts amongst advocates of psychedelics, between those who lean towards mainstream acceptance and medical provision and those who prefer decentralized, non-corporate access to the substances. One vocal skeptic of psychedelic mainstreaming is David Nickles, once an administrator of the underground psychedelic website 'The DMT Nexus' and now a core member of Psymposia, an anti-capitalist media outlet in the psychedelic space. Tracking developments in the mainstreaming of psychedelics by corporate entities they dryly call 'corporadelics,'[1] Psymposia has been at the leading edge of an enduring current of countercultural Anglo-American psychedelia that focuses on political economic critique. Nickles himself is perceived within the broader psychedelic ecology differently depending on who you ask – from 'speaking truth to power', to being a 'shock-jock,' to being a much-needed 'system disruptor'.

[1]Psymposia explain the term in the following way:
"cor-por-ra-del-ic (adj): manifesting corporate structures, ethos, or logic within the context of the psychedelic landscape.
cor-por-ra-de-lia (n.): the world of people, phenomena, or items associated with corporadelic entities.
The term "corporadelic" was initially coined independently and simultaneously by Dr. Katherine MacLean (a former lead researcher and session guide for psilocybin research at Johns Hopkins University School of Medicine) and Brett Greene (co-founder emeritus of Psymposia and founder of psychedelic pharmaceutical company, Adelia Therapeutics) in 2019. Dr. MacLean defined the term as, "manifesting corporations to commodify psychedelic experiences.""
From the Psymposia website, retrieved 21st April 2021.

I came to know of Nickles in 2015, as a well-connected figure in the US psychedelic underground who spoke at conferences lauding the valuable research and harm reduction work being done in the shadows of the research trials. By 2018 he had become much more vocal in his criticism of psychedelic mainstreaming. We first spoke that year, towards the end of an event organized by Brazilian anthropologist Beatriz Labate, who had invited Nickles onto a panel alongside key figures in the revival of psychedelic research trials, to discuss the topic, 'Capitalism's Systemic Issues: Will They Emerge in Psychedelic Medicine and Practices?' Nickles offered a rousing call for systemic critique within psychedelic-using communities. The panel was viewed by many as a wake-up call for thinking about psychedelic mainstreaming, and propelled Nickles to celebrity-status amongst attendees of the psychedelic conference circuit.

In a recent interview, Nickles described to me coming across Shoshanna Zuboff's influential book, *The Age of Surveillance Capitalism*, the following year. Her study of digital surveillance served as what Nickles called a "dawning coalescing" of his own analyses, in some ways as profound as the "radical synthesis" of his first psychedelic mushroom experience many years earlier where he first realized – to invoke the cliché – that "everything is connected". Zuboff offered Nickles a clear articulation of the stakes in the race to set up proprietary digital platforms in the psychedelic therapy space. He found her terminology powerful, from appreciating the importance of data "granularity" to considering the "data exhaust" from wearables and apps as "the perfect term, you're just off-gassing all this data." For Nickles, Zuboff continues to be the missing link sorely needed for those who otherwise view digital psychedelia through rose-tinted glasses.

Throughout our interview, Nickles moved with ease between Zuboff's analyses and a detailed map of changing players in the ever-more-dynamic psychedelic industry. He detailed the growth of infrastructural platforms which encourage psychedelic users and service providers to log potentially incriminating information about psychedelic experiences and integration journeys onto their servers, while extracting granular pictures of their users that could be sold for targeted advertising revenue. He anticipates a flood of nutraceutical companies peddling new varieties of "snake oil" (the same phrasing that computer scientist Arvind Narayanan used in a 2021 talk to describe the often overblown promises of many artificial intelligence initiatives). Nickles' biggest concern is the "serious con game" of claiming to be able to make predictions about likelihoods of benefit from psychedelic-assisted therapy using machine learning algorithms whose inner workings are themselves opaque, in service of a new competitive arms race to maximize the returns on what Zuboff calls the "surveillance dividend" (and see Malik, 2020 for a trenchant critique of the supposed "predictiveness" of many kinds of predictive algorithms).

Joking that his speculations are probably like a five-year-old's crayon drawing compared to the actual behind-the-scenes conversations, Nickles describes existing legal protections as a smokescreen, noting how quick many of the new US-based companies are to emphasize that they are patient health information protection- (or HIPAA-) compliant, and yet "…if I do a search for gonorrhea and then my GPS shows me walking to that clinic, these data are not HIPAA-protected!" (cf. Stark, 2018; see also Friesen, 2020). With near-totalizing surveillance,

Nickles is keen to highlight how these technologies and services are deeply unjust. The benefits, he insists, are too often accepted in terms of the predictive promises that they say they will one day be able to offer, while concerns over the costs of surveillance are too quickly dismissed, and even parried through attacks on skeptical interlocutors like Nickles, with "What are *you* hiding?" being a common retort.

Caption: Psymposia meme shared several times on their social media platforms with #bonk

Part 3: Attending to Paranoia

By the time he joined Psymposia, Nickles had amassed substantial social capital through connections with a sprawling web of psychedelic researchers, both overground and underground. I was struck by how willing he has been to risk losing relationships by employing shock-jock tactics to 'field-test' his analyses through social media-based provocations, drawing in key corporadelic players and then challenging them and the psychedelic researchers that have partnered with them to rebut his arguments.[2] He insists that they never do - instead, he explains that a common response he gets from psychedelic researchers and corporadelic players when calling attention to the data harvesting of digital psychedelia is to be dismissed as paranoid. For my part, I have always found Nickles' positions to be well-grounded in social, political, and economic analyses. He points out that medical psychedelia is unique in offering a whole new paradigm for mental healthcare and as such it will be all the easier to normalize heightened levels of surveillance. And while it may be the case that when we look at the computational abilities of artificial intelligence, Nickles' remark that "everything's an open book!" is crediting data analysis (and analysts) with too much capacity, the collateral harms from amassing data about people's intimate experiences and overselling the capabilities of the predictive technologies are genuine causes for concern.

[2] This resonates with dissident modalities of ethnographic inquiry that are more caustic, impolite and offensive (e.g. Rabinow, 1977).

There are also other aspects to the dismissal of Nickles as paranoid that I think require attention. Firstly, in terms of structuring conditions, how for-profit companies are buying and selling data on human experience in conditions of secrecy. When a mindfulness company advertised its partnership with a large psychedelic pharma company around 2016, Nickles insisted that their market cap didn't accord with their overt business model, and suggested that this might be explained by a hidden data exhaust that they were confidentially advertising to their investors as integral to their business plan. And who's to say? Arguments for hidden capacities and agencies in the absence of clear evidence are much harder to dismiss once one accepts secrecy as a standard operating practice.

Secondly, Nickles' critiques have made him a bogeyman for the psychedelic community-cum-industry which is in a state of optimism and expansion but also uncertainty as to how things will actually pan out. Understandably, naysayers are not welcome where the prospect of legitimation and profit is in the air. Indeed, the emergence of an overground psychedelic therapy industry is symbolically significant for what have, since the 1970s, been illicit drugs.

Thirdly, paranoia has long been a pathological marker in psychedelic-assisted therapy, used to signal the limits of the therapy itself. As the psychedelic therapy pioneer Stanislav Grof has cautioned, it is widely accepted that one cannot do effective psychedelic therapy with people who are paranoid (Grof and Grob, 2009) on the basis that a strong therapeutic rapport is paramount. Today paranoia is described by some researchers as a kind of failure – an outcome of psychedelic ingestion under poor contexts (a claim the rise of digital psychedelia may soon enable us to test), while in the 1960s paranoia was understood as the unrecuperable counterpoint to the kind of madness that might instead be viewed as a shamanic initiation (Silverman, 1967).

Fourthly, much of the critical bite of Nickles' and Zuboff's arguments focus on data collected by the interfaces of digital psychedelia, but what of the experience of using such interfaces? By interacting with the experiences that they draw upon, the interfaces shape the meaning of psychedelic experiences while themselves remaining somewhat invisible (Star, 1999). The mediating work they do is intimate even as it is algorithmic, helping users to make sense of potentially sublime, bewildering, profound and deeply personal experiences. I like to think of them as "technologies of enchantment" in reference to Alfred Gell's (1992) analysis of art, because doing so makes them continuous with the *non*-algorithmic practices of non-verbal artistry required to integrate psychedelic experiences that are so valued within the psychedelic community. Perhaps this helps to explain why the interfaces are excused from suspicion, a suspicion that lands instead on Nickles himself.

And yet, our deepening relationship with predictive devices and apps is configuring and normalizing certain structures of feeling, of being listened to and acted upon by hidden agencies and forces. It evokes the notion of 'conspirituality,' merging conspiracy and spirituality (Ward and Voas, 2011; Asprem and Dyrendal, 2015), a term that has recently gained currency amongst those interested in the interface of psychedelics and politics. I find this suggestive of an elective affinity between the deepening sense and recognition of being surveilled and

steered through invisible digital technologies, and the mainstreaming of ways of relating to hidden beings, non-normative states, and sources of truth through psychedelic use, what anthropologist Joanna Steinhardt has discussed in terms of a '(neo)animism.' All this may mark a larger cultural entrainment to everyday experiential landscapes that are increasingly recognised as recalcitrant, listening, and offering predictive insights (cum-insightful predictions), for those of us capable of receiving them.

Could then there be more scope for agreement and even solidarity between Nickles' political economic critique of psychedelic surveillance capitalism and his detractors within the increasingly fragmenting 'psychedelic community'? Both can be understood as what Ursula le Guin has called "realists of a wider reality". Indeed, what if psychedelic-using groups and advocates could help develop alternative practices for engaging with digital surveillance in mental healthcare writ-large, practices that are neither 'for' nor 'against' it but render it legible in other ways? In encouraging the curious embrace of all one encounters through psychedelic experiences, the dominant 'inner healer' model of psychedelic-assisted therapy appears to have phenomenological affinity with 'pronoia', an inversion of paranoia coined to depict the view that the world is conspiring for our benefit (cf. Weil, 1972: 177; Goldner, 1982). This needs to be situated within a much wider ecology of practices, for example drawing on traditions outside of the Euro-American modern (for example, Harner, 1980; Gow, 2001; Beyer, 2009) and in underground sites adjacent to the university research trials themselves (Davis, 2020; Strassman, 2018), that do not suggest all entities encountered should be trusted, and that urge the cultivation of discernment over when and how to enter into psychedelic experiences. The regular and sustained engagement with psychedelic experiences across these psychedelic-using sub-cultures may then offer a model for understanding the affective dynamics of digital surveillance, including in how our relationship to the technologies move between enchantment, trust or deference, anxiety or shame, and suspicion. Insights from case studies of psychedelic use could help us think through the pitfalls that lead into pathologies of paranoia, and what – with reference to drug-using cultures – we could call 'harm reduction' strategies that allow for something new to emerge. I believe these could offer ways of tethering psychedelic experiences to renewed and liberatory psychopolitics without merely dismissing the encroachments and effects of digital surveillance.

Conclusion

Nickles critique, itself an application of Zuboff's immensely influential text on surveillance capitalism, is that the psychedelic community cannot see the incursions of digital psychedelia for what they are. In this article I have tried to dwell on the response that he is being paranoid, less to adjudicate on this claim and more to highlight ways that his critical reading of digital surveillance and the practices and subjectivities engendered amongst many of his audience both share in certain ways of engaging with the world, as lively and receptive, with hidden forces that are listening to, and in turn steering, us. That invites a reparative approach (Sedgwick, 2003) to paranoid readings of surveillance technologies, wherein the psychedelic community is treated as a source of expertise uncannily suited to the age of digital psy.

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